



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,675	11/20/2001	Kiyoyuki Nakagawa	018976-210	9042

7590

04/07/2004

Platon N. Mandros
BURNS, DOANE, SWECKER & MATHIS, L.L.P.
P.O. Box 1404
Alexandria, VA 22313-1404

EXAMINER

WILSON, LEE D

ART UNIT

PAPER NUMBER

3723

DATE MAILED: 04/07/2004

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/988,675

Applicant(s)

NAKAGAWA ET AL.

Examiner

LEE D WILSON

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8,13,14 and 18 is/are allowed.
- 6) ☒ Claim(s) 7,9,10,12 and 15-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 7, 9-10, 12, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Togawa et al (6283822) in view of Graham et al (6270747).

a. Togawa et al teach a method comprising the steps of manufacturing electronin devices (14) in aligned relationship, supplying a plurality of electronic component chips and cleaning (stations 7a, 7b, & 8a,8b, col.5, lines 15-30).

b. Togawa et al do not teach the specific workpiece being an external electrode.

c. Graham et al teach a method having the steps of manufacturing and cleaning an external electrode (281 and col.5, lines 54-60 which mention a variety of workpiece including semiconductors) which disclose that it known to clean semiconductors and external electrode workpieces.

d. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the Togawa et al device by providing a workpiece such as an external electrode as taught by Graham et al which disclose that it known to clean semiconductors and external electrode workpieces.

3. Claims 7, 9-10, 12, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lanbunsky et al (6132289) in view of Graham et al (6270747).

e. Lanbunsky et al teach a method comprising the steps of manufacturing electronin devices (12 and col. 4, lines 29-34) in aligned relationship, supplying a plurality of electronic component chips and cleaning (36&39 using a cleaning solution or liquid (col.5, lines 44-50)).

f. Lanbunsky et al al do not teach the specific workpiece being an external electrode.

g. Graham et al teach a method having the steps of manufacturing and cleaning an external electrode (281 and col.5, lines 54-60 which mention a variety of workpiece including semiconductors) which disclose that it known to clean semiconductors and external electrode workpieces.

4. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the Lanbunsky et al device by providing a workpiece such as an external electrode as taught by Graham et al which disclose that it known to clean semiconductors and external electrode workpieces.

Allowable Subject Matter

5. Claims 8, 13-14 and 18 are allowed.

Response to Arguments

6. **Applicant's arguments with respect to claims 7, 9-10, 12, and 15-17 have been considered but are moot in view of the new ground(s) of rejection.**

- h. The applicant amended the claims which have drawn a new rejection. Togawa et al and Lanbunsky et al disclose the manufacture and cleaning of workpieces. The Graham et al references teach that it known to clean external electrodes and even semiconductors. Togawa and Lanbunsky et al just does not disclose the use of this workpiece so it is obvious to use a variety of workpieces especially semiconductors with external electrodes.
- i. The applicant argues that manufacturing is not disclosed but just polishing. The applicant has not claimed any specific manufacturing and even grinds the workpiece in dependent claims. If no specific manufacturing process is not claimed then how can some specific process be considered especially when the dependent claims then go and call for grinding.
- j. The cleaning method of the prior art will clean the entire workpiece along with any external parts.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

Art Unit: 3723

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

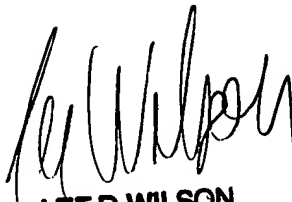
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEE D WILSON whose telephone number is 703-305-4094. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOSEPH HAIL can be reached on 703-308-2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ldw

April 1, 2004



LEE D. WILSON
PRIMARY EXAMINER